

Notice of References Cited

Application/Control No.

09/776,278

Applicant(s)/Patent Under
Reexamination
SULLIVAN, MICHAEL J.

Examiner

Raeann Gorden

Art Unit

3711

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification	
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	B	US-US005314187A-	05-1994	Proudfit	473	373
	C	US-US005068151A-	11-1991	Nakamura	473	374
	D	US-US004431193A-	02-1984	Nesbitt	473	373-
	E	US- -				
	F	US- -				
	G	US- -				
	H	US- -				
	I	US- -				
	J	US- -				
	K	US- -				
	L	US- -				
	M	US- -				

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*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification	
	N	- -					
	O	- -					
	P	- -					
	Q	- -					
	R	- -					
	S	- -					
	T	- -					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 1 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1 -1 P-3724-2-F1-C1-C1 Applicants: Sullivan Filing Date: Herewith		Serial No.: Unknown Group: 3711	
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	3,053,539	9/1/62	Piechowski				
	3,264,272		Rees				
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Examiner: <i>Jacanny</i>				Date Considered: <i>62701</i>			
* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.							

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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 2 of 10	Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1	Serial No.: Unknown 01716, 278
	Applicants: Sullivan	
	Filing Date: Herewith	Group: 3711

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Initial*	Document No.	Date	Name	Class	Subcl.	Filing Date
RG	4,076,255	02/1978	Moore et al.			
	4,085,937	04/1978	Schenk			
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RG	Bayer Corporation, "Engineering Polymers Properties Guide Thermoplastics and Polyurethanes," brochure, pp. 2-7, 28-29
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Examiner:

Date Considered: 6-27-01

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.

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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 3 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1 -1 P-3724-2-F1-C1 -C1		Serial No.: <u>Unknown</u> <u>591776, 278</u>	
		Applicants: Sullivan			
		Filing Date: Herewith		Group: 3711	

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R.G.	4,674,751	06/1987	Molitor et al.				
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	ESCOR ACID TERPOLYMERS, EXXON Chemical Co.
	Translated Claims for JP 1,771,941 publ. 8/6/92

Examiner: <u>Joann Haden</u>	Date Considered: <u>6-27-01</u>
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.

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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 4 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1		Serial No.: Unknown 69/1716,278	
		Applicants: Sullivan		Filing Date: Herewith	
				Group: 3711	

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<i>RL</i> ↓	4,957,297	09/1990	Newcomb et al.				
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Examiner: <i>William A. Anderson</i>	Date Considered: 6-27-01
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Subst. Form PTO-1449 APPLICANT'S(S') INFORMATION DISCLOSURE STATEMENT Page 5 of 10	Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1	Serial No.: Unknown-
	Applicants: Sullivan	
	Filing Date: Herewith	Group: 3711

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Examiner:

Robert J. Hender

Date Considered:

6-27-01

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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 6 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1		Serial No.: Unknown	
		Applicants: Sullivan			
		Filing Date: Herewith		Group: 3711	

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Examiner: <i>Deborah M. Hough</i>	Date Considered: <i>6-27-07</i>
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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 8 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1		Serial No.: Unknown	
		Applicants: Sullivan			
		Filing Date: Herewith		Group: 3711	

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Document No.	Date	Country	Class	Subcl.	Translation?		

OTHER ART	

Examiner: <i>Kalvin Hender</i>	Date Considered: 10-27-07
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if in conformance and not considered. Include copy of this form with next communication to applicant.

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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 9 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1		Serial No.: Unknown	
		Applicants: Sullivan			
		Filing Date: Herewith		Group: 3711	

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Document No.	Date	Country	Class	Subcl.	Translation?		

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Examiner:	Date Considered: 6-27-01
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Subst. Form PTO-1449 APPLICANT'S(S) INFORMATION DISCLOSURE STATEMENT Page 10 of 10		Atty. Docket No.: SLD 2 035-3-3-1-1-1 P-3724-2-F1-C1-C1		Serial No.: Unknown	
		Applicants: Sullivan			
		Filing Date: Unknown		Group: 3711	

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Document No.	Date	Country	Class	Subcl.	Translation?		

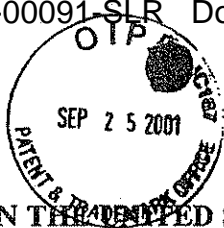
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Examiner: <i>William Hender</i>	Date Considered: 6-27-01
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P-3724-2-F1-C1-C1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Michael J. Sullivan

Serial No.: 09/776,278

Examiner: R. Gorden

Filing Date: February 2, 2001

Group Art Unit: 3711

For: IMPROVED MULTI-LAYER GOLF BALL

Commissioner for Patents & Trademarks
Washington, DC 20231

Sir:

RESPONSE

This is in response to the Office Action of July 3, 2001. Please consider the following remarks.

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CERTIFICATE OF MAILING (37 C.F.R. 1.8a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class mail in an envelope addressed to: Commissioner of Patents & Trademarks, Washington, D.C. 20231, on this 19th day of September, 2001.

Laura J. Nolan

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09/776,278

P-3724-2-F1-C1-C1

REMARKS

Reconsideration and entry of the amendment are respectfully requested. Claims 1 to 8 are currently pending, and no claims have been amended.

The Office Action mailed July 3, 2001 addressed Claims 1 to 8. Claims 1 to 8 were rejected.

The specification was objected to by the Examiner as failing to provide proper antecedent basis for the claimed subject matter, and correction was required. The Examiner stated that in claim 7, an outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi is not in the specification.

The present application is a continuation of several applications which relate back to U.S. Patent Application Serial No. 08/556,237, filed on November 9, 1995. Original claim 6 (initially mislabeled as claim 8 in the specification) specifies that the outer cover layer has a flex modulus in a range of about 1,000 to about 30,000 psi. Specifically, claim 6 reads as follows:

[8.] 6. A multi-layer golf ball comprising:

a spherical core;

an inner cover layer molded over said spherical core to form a spherical intermediate ball, said inner cover layer comprising an ionomeric resin having no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and having a modulus of from about 15,000 to about 70,000 psi;

an outer cover layer molded over said spherical intermediate ball to form a multi-layer golf ball, the outer layer comprising a non-ionomeric elastomer selected from the group consisting of polyester elastomer, polyester, polyether polyurethane and polyester amide, **said outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi. (Emphasis added.)**

Since the limitation directed to the flex modulus of the outer cover was included in original claim 6 (labeled as claim 8 when filed), it is part of the specification. A copy of pages 48 to 50 of the original specification directed to claims 1 to 6 is attached for the Examiner's convenience. Applicant therefore respectfully submits that the

09/776,278

P-3724-2-F1-C1-C1

specification provides proper antecedent basis for the claimed subject matter, therefore Applicant respectfully requests that the objection be reconsidered and withdrawn.

Claims 1 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Proudfit in view of Nakamura. The Examiner stated that Proudfit discloses a golf ball comprising a core, an inner cover layer and an outer cover layer. The Examiner further stated that the inner cover layer is made from an ionomer and the outer cover is made from an elastomer, but Proudfit does not disclose an inner cover layer with a carboxylic acid. The Examiner further stated that Nakamura teaches an ionomer comprising 10 to 20% by weight of an alpha, beta-unsaturated carboxylic acid. The Examiner concluded that since the addition of acids to ionomers is very common, one of ordinary skill in the art would have added an acid to the inner cover layer of Proudfit to increase the flexibility of the composition.

Proudfit discloses a golf ball comprising a core, an inner cover layer, and an outer cover layer. The inner cover layer is made from an ionomer, and the outer cover layer is made from an elastomer. Proudfit does not disclose an inner cover layer with a carboxylic acid. Additionally, the elastomer of the outer cover layer of Proudfit is a natural or synthetic balata (see column 5, line 15 to column 6, line 31). Applicant's invention is not directed to a golf ball comprising a balata outer cover layer. The cover of Applicant's golf ball comprises a polyurethane. The present application, at page 2, lines 11 to 14, distinguishes the use of a polyurethane cover over a balata cover, such as the cover claimed by Proudfit. Specifically, the specification states: "Despite all the benefits of balata, balata covered golf balls are easily cut and/or damaged if mis-hit. Golf balls produced with balata or balata-containing cover compositions therefore have a relatively short lifespan." Since, as discussed above, the primary reference, Proudfit, is deficient because it does not disclose a golf ball with an outer cover layer comprising polyurethane, the addition of Nakamura as a secondary reference does not cure this deficiency. Neither Proudfit alone as the primary reference, nor in combination with Nakamura, produces a golf ball comprising an inner cover layer comprising at least one ionomer resin having less than 16 % acid and an outer cover layer comprising a polyurethane. Adding the ionomer of Nakamura to Proudfit does not produce

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09/776,278

P-3724-2-F1-C1-C1

Applicant's golf ball, which comprises an inner cover layer having less than 16 % acid and an outer cover layer comprising a polyurethane.

For at least these reasons, Applicant respectfully submits that claims 1 and 3 are not obvious under 35 U.S.C. § 103(a) over Proudfit in view of Nakamura. Applicant therefore respectfully requests that the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) as obvious over Proudfit in view of Nakamura be reconsidered and withdrawn.

Claims 1 to 8 were rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over claims 1 to 8 of U.S. Patent No. 6,210,293. The Examiner stated that although the conflicting claims are not identical, they are not patentably distinct from each other because the '293 patent and the present application claim golf balls comprising a core, an inner cover layer and an outer cover layer, and the inner cover layer is made from ionomer and the outer cover layer is made from a polyurethane.

Although Applicant respectfully disagrees with the Examiner, in an effort to hasten prosecution, Applicant herein submits a Terminal Disclaimer which disclaims the terminal portion of any patent granting from the instant application, as required under MPEP § 1490. Applicant respectfully submits that this overcomes the rejection.

The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

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09/776,278

P-3724-2-F1-C1-C1

CONCLUSION

Applicant respectfully requests reconsideration and allowance of each of the presently rejected claims, claims 1 to 8. Applicant respectfully requests allowance of claims 1 to 8, the claims currently pending.

Respectfully submitted,

Michael J. Sullivan

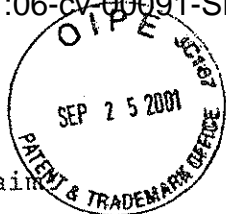
Customer No. 24492
Phone: (413) 322-2937

Date: September 19, 2001

By: Michelle Bugbee
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cc: Richard M. Klein, Esquire (SLD 2 0035-3-3-1-1-1)

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I claim:

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1. A golf ball comprising:

a core;

an inner cover layer having a Shore D hardness of 60 or more molded on said core, the inner cover layer comprising a blend of two or more low acid ionomer resins containing no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid; and

an outer cover layer having a Shore D hardness of 64 or less molded on said inner cover layer, said outer cover layer comprising a relatively soft polymeric material selected from the group consisting of non-ionomeric thermoplastic and thermosetting elastomers.

2. A golf ball according to claim 1, wherein the inner cover layer has a thickness of about 0.100 to about 0.010 inches and the outer cover layer has a thickness of about 0.010 to about 0.70 inches, the golf ball having an overall diameter of 1.680 inches or more.

3. A golf ball according to claim 1 wherein the inner cover layer has a thickness of about 0.050 inches and the outer cover layer has a thickness of about 0.055 inches, the golf ball having an overall diameter of 1.680 inches or more.

4. A golf ball according to claim 1 wherein the outer layer comprises a polyurethane based material.

5. A multi-layer golf ball comprising:

a spherical core;

5 an inner cover layer having a Shore D hardness of about 60 or more molded over said spherical core, said inner cover layer comprising an ionomeric resin including no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and having a modulus of from about 15,000 to about 70,000 psi;

10 an outer cover layer having a Shore D hardness of about 64 or less molded over said spherical intermediate ball to form a multi-layer golf ball, the outer layer comprising polyurethane based material.

6. A multi-layer golf ball comprising:

a spherical core;

5 an inner cover layer molded over said spherical core to form a spherical intermediate ball, said inner cover layer comprising an ionomeric resin having no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and having a modulus of from about 15,000 to about 70,000 psi;

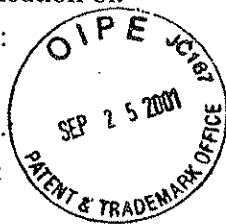
an outer cover layer molded over said spherical intermediate ball to form a multi-layer golf ball, the outer layer

10 comprising a non-ionomeric elastomer selected from the group consisting of polyester elastomer, polyester, polyether polyurethane and polyester amide, said outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi.

Terminal Disclaimer
h. m. oga
10/2/01

P-3724-2-F1-CI-CI
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Michael J. Sullivan
Serial No.: 09/776,278
Filed: February 2, 2001
Group No.: 3711
Examiner: R. Gorden
For: Improved Multi-Layer Golf Ball



Commissioner of Patents and Trademarks
Washington, D.C. 20231

TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING
REJECTION (37 CFR 1.321(b))

Identification Of Person(s) Making This Disclaimer

Name(s) of disclaimant(s): Richard M. Klein
having an address of: Fay, Sharpe, Fagan, Minnich & McKee, LLP
1100 Superior Avenue, Seventh Floor
Cleveland, OH 44114-2518

represent that I am

- ☐ an inventor of this invention
☐ an assignee of this invention
☒ XX Attorney of record in the present application

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OCT 11 2001
TECHNOLOGY CENTER R3700

CERTIFICATE OF MAILING (37 CFR 1.8a)

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an enveloped addressed to the: Assistant Commissioner of Patents and Trademarks, Washington, D.C. 20231

Laura J. Nolan
Laura J. Nolan

Date: September 19, 2001

(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b)))

{9-4}-page 1 of 4)

NOTE - See fee on # 6

CW 0309038

09/776,278

-2-

P-3724-2-F1-C1-C1

Identity of Assignee and Title of Disclaimant (if applicable)

The assignee is

Name of assignee: Spalding Sports Worldwide, Inc.
Address of assignee: 425 Meadow Street
Chicopee, MA 01013

Title of disclaimant authorized to sign on behalf of assignee:

Counsel

Recordal of Assignment in PTO

XX the assignment to Spalding Sports Worldwide, Inc. from Lisco Inc.
was recorded on Reel: 010232; Frame: 0251 on April 23, 1999;
the assignment to Lisco Inc. was recorded on Reel: 7750; Frame: 0242
on November 9, 1995
___ authorization for recordal of the assignment is separately attached

Extent of Interest

The extent of my (our) interest is in

XX the whole of this invention
___ a sectional interest in this invention as follows (here
state the exact interest of the disclaimant(s):

Statement Pursuant to 37 C.F.R. 3.73(b)

I the undersigned, have reviewed all the evidentiary documents in the chain
of title of the

XX patent application
___ patent

matter identified above and, to the best of my knowledge and belief, title is in the
assignee identified above which is seeking to take action.

(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b))
{9-4}-page 2 of 4)

CW 0309039

09/776,278

-3-

P-3724-2-F1-C1-C1

Disclaimer

I hereby disclaim the terminal part of any patent granted on the above-identified application, which would extend beyond the expiration date of the full statutory term of:

XX United States Patent No. 6,210,293, as presently shortened by any terminal disclaimer

 Any patent granted on application number:

and hereby agree that any patent so granted on the above-identified application shall be enforceable only for and during such period that the legal title to said patent shall be the same as the legal title to

XX United States Patent No. 6,210,293

 Any patent granted on application number:

this agreement to run with any patent granted on the above-identified application and to be binding upon the grantor, its successors or assigns.

Petitioner does not disclaim any terminal part of any patent granted on the above-identified application prior to the expiration date of the full statutory term of

XX United States Patent No. 6,210,293 as presently shortened by any terminal disclaimer

 Any patent granted on application number:

In the event that it later: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321(a), has all claims canceled by a reexamination certificate, or is otherwise terminated prior to expiration of its statutory term as presently shortened by any terminal disclaimer, except for the separation of legal title stated above.

(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b))

{9-4}--page 3 of 4)

CW 0309040

09/776,278

-4-

P-3724-2-F1-C1-C1

Fee Status

(37 CFR 1.20(d) and 37 CFR 1.321)

☒ other than a small entity -- fee \$110.00

☐ small entity--fee \$55.00

☐ verified statement attached

☐ verified statement filed on _____

Fee Payment

☐ Attached is a check in the sum of \$ _____

☐ The fee for this Disclaimer was previously paid on ; _____.

☒ Charge Account 17-0150 for any fee deficiency required by this paper.

☒ Charge Account 17-0150 the sum of \$110.00. A duplicate of this disclaimer is

☒ attached.

Declaration

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Spalding Sports Worldwide, Inc.

Date: 9/4/2001

By: Richard M. Klein
Richard M. Klein, Counsel
Reg. No. 33,000
Fay, Sharpe, Fagan, Minnich & McKee, LLP
1100 Superior Avenue, Seventh Floor
Cleveland, OH 44114-2518

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(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b))

{9-4}-page 4 of 4)

CW 0309041

09/776,278

-4-

724-2-F1-C1-C1

Fee Status

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XX other than a small entity -- fee \$110.00

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 verified statement filed on _____

Fee Payment

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XX Charge Account 17-0150 for any fee deficiency required by this paper.

^ or 06-0308 (Rmk 10/4/2001)

XX Charge Account 17-0150 the sum of \$110.00. A duplicate of this disclaimer is

XX attached.

^ or 06-0308 (Rmk 10/4/2001)

Declaration

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Spalding Sports Worldwide, Inc.

Date: 9/4/2001

By: Richard M. Klein (Rmk 10/4/2001)
Richard M. Klein, Counsel
Reg. No. 33,000
Fay, Sharpe, Fagan, Minnich & McKee, LLP
1100 Superior Avenue, Seventh Floor
Cleveland, OH 44114-2518

(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b))

{9-4}-page 4 of 4)

CW 0309042

7/Confirmation of T.D. Sec
Lmorga-
3711
10/18/01

FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP

PATENT TRADEMARK AND COPYRIGHT LAW

1100 SUPERIOR AVENUE

SEVENTH FLOOR

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JUDE A. FRY
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MICHAEL E. HUDZINSKI
RICHARD M. KLEIN
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TELEPHONE (216) 861-5582

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ANUJ K. WADHWA

JOSEPH E. WATERS
PATRICK D. FLOYD
OF COUNSEL
RICHARD J. MINNICH
SUE ELLEN PHILLIPS
REGISTERED PATENT AGENT
THOMAS TILLANDER
ALBERT P. SHARPE, III
1959-2001

*NOT ADMITTED IN OHIO

October 4, 2001

Richard M. Klein
RKlein@faysharpe.com

CONFIRMATION COPY

VIA FACSIMILE
CONFIRMATION COPY BY MAIL

LaShawn Morgan
U.S. Patent and Trademark Office
Washington, D.C. 20231

RE: U.S. Patent Application Serial No. 09/776,278
For: IMPROVED MULTI-LAYER GOLF BALL
Attorney Docket No. P-3724-2-F1-C1-C1
Our Reference No. SLD 2 0035-3-3-1-1-1

Dear Ms. Morgan:

It is our understanding, that the U.S. Patent and Trademark Office believes that a deficiency may exist in the Terminal Disclaimer that we submitted on September 19, 2001 concerning the above-identified U.S. Patent application. Evidently, the Terminal Disclaimer indicated that fees associated with the filing of the Disclaimer should be charged to Account No. 17-0150. I, Richard M. Klein, as an agent for Spalding Sports Worldwide, Inc. executed the Terminal Disclaimer. However, according to your accounting records, I am not authorized to charge any fees to Spalding's Account No. 17-0150. In order to correct this deficiency, I have included herewith a new page 4 wherein I have authorized that any fees concerning the Terminal Disclaimer should be charged to our firm's account, i.e. Account No. 06-0308. This we believe, should alleviate the deficiency as previously noted by the U.S. Patent and Trademark Office.

CW 0309043

LaShawn Morgan
U.S. Patent and Trademark Office
October 4, 2001
Page 2

Kindly review the above information and the attached materials, and if you have any further questions concerning the same, please feel free to contact us at your convenience.

Very truly yours,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP



Richard M. Klein

RMK/lab

cc: Michelle Bugbee, Esq.
Enclosure

N:\SLD\20035\3B1C\LAB0275A.WPD

CW 0309044

*6/1/01 re: Fee Authorization
10/5/01*

FAY, SHARPE, FAGAN, MINNICH & MCKEE, LLP

PATENT TRADEMARK AND COPYRIGHT LAW

1100 SUPERIOR AVENUE

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CLEVELAND, OHIO 44114-2515

TELEPHONE (216) 561-5552

FAX (216) 241-1855

E-MAIL: ls@faysharpe.com

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PHILIP J. MOY, JR.
TIMOTHY E. NAUMAN
PATRICK R. ROCHE
MARK S. SVAT

*NOT ADMITTED IN OHIO

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EDWARD T. KENNEDY
ANUS K. WADNWA

JOSEPH E. WATERS
PATRICK D. FLOYD

BY COUNSEL
RICHARD J. MINNICH
SUE ELLEN PHILLIPS

REGISTERED PATENT AGENT
THOMAS TILLANDER

ALBERT P. SHARPE, III
1959-2001

October 4, 2001

Richard M. Klein
RKlein@faysharpe.com

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CONFIRMATION COPY BY MAIL

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OCT 05 2001

GROUP 3700

LaShawn Morgan
U.S. Patent and Trademark Office
Washington, D.C. 20231

RE: U.S. Patent Application Serial No. 09/776,278
For: IMPROVED MULTILAYER GOLF BALL
Attorney Docket No. P-3724-2-F1-C1-C1
Our Reference No. SLD 2 0035-3-3-1-1-1

Dear Ms. Morgan:

It is our understanding, that the U.S. Patent and Trademark Office believes that a deficiency may exist in the Terminal Disclaimer that we submitted on September 19, 2001 concerning the above-identified U.S. Patent application. Evidently, the Terminal Disclaimer indicated that fees associated with the filing of the Disclaimer should be charged to Account No. 17-0150. I, Richard M. Klein, as an agent for Spalding Sports Worldwide, Inc. executed the Terminal Disclaimer. However, according to your accounting records, I am not authorized to charge any fees to Spalding's Account No. 17-0150. In order to correct this deficiency, I have included herewith a new page 4 wherein I have authorized that any fees concerning the Terminal Disclaimer should be charged to our firm's account, i.e. Account No. 06-0308. This we believe, should alleviate the deficiency as previously noted by the U.S. Patent and Trademark Office.

10/05/2001 LHMORGAN 00000001 060308 09776278

01 FC:148 110.00 CH

CW 0309045

LaShawn Morgan
U.S. Patent and Trademark Office
October 4, 2001
Page 2

Kindly review the above information and the attached materials, and if you have any further questions concerning the same, please feel free to contact us at your convenience.

Very truly yours,

FAY, SHARPE, FAGAN,
MINNICH & McKEE, LLP


Richard M. Klein

RMK/lab

cc: Michelle Bugbee, Esq.
Enclosure

N:\SLD\220353\B1\CL\AB0275A.WPD

Fee Status

(37 CFR 1.20(a) and 37 CFR 1.321)

☒ other than a small entity -- fee \$110.00

☐ small entity--fee \$55.00

☐ verified statement attached

☐ verified statement filed on _____

Fee Payment

☐ Attached is a check in the sum of \$ _____

☐ The fee for this Disclaimer was previously paid on : _____

☒ Charge Account 17-0150 for any fee deficiency required by this paper.
or 06-0308 (Rule 10/1/2001)

☒ Charge Account 17-0150 the sum of \$110.00. A duplicate of this
disclaimer is
☒ attached. or 06-0308 (Rule 10/1/2001)

Declaration

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Spalding Sports Worldwide, Inc.

Date: 9/4/2001

By: R.M. Klein (Rule 10/1/2001)
Richard M. Klein, Counsel
Reg. No. 33,000
Fay, Sharpe, Pagan, Minnich & McKee, LLP
1100 Superior Avenue, Seventh Floor
Cleveland, OH 44114-2518

(Terminal Disclaimer to Obviate a Double Patenting Rejection (37CFR 1.321(b))
(9-4)-page 4 of 4)

CW 0309047

#6

FAY, SHARPE, FAGAN, MINNICH & McKEE, LLP
1100 SUPERIOR AVENUE, SEVENTH FLOOR
CLEVELAND, OHIO 44114-2518
(216) 861-5582

FAX RECEIVED

OCT 05 2001

GROUP 3700

DATE:	October 4, 2001
TO:	U.S. Patent and Trademark Office
ATTENTION:	LaShawn Morgan
FACSIMILE NO.:	703-305-3579 3711
FROM:	Richard M. Klein
RE:	U.S. Patent Application No.09/776,278 Attorney Docket No. P-3724-2-F1-C1-C1 Our Reference No. SLD20035-3-3-1-1-1

Total number of pages (including this cover sheet): 4

Please call us immediately at (216) 861-5582 if the telecopy you receive is incomplete or illegible. Our facsimile numbers are (216) 241-1868 and (216) 241-5147.

Comments:

The documents accompanying this facsimile transmission include information from the firm of Fay, Sharpe, Fagan, Minnich & McKee, LLP that might be legally privileged and/or confidential. The information is intended for the use of only the individual or entity named on this cover sheet. If you are not the intended recipient, any disclosure, copying, or distribution of these documents, or the taking of any action based on the contents of this transmission, is prohibited. If you have received this transmission in error, these documents should be returned to this firm as soon as possible, and we ask that you notify us immediately by telephone so we can arrange for their return to us without cost to you.

CW 0309048



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS
 Washington, D.C. 20231
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,278	02/02/2001	Michael J. Sullivan	P-3724-2-F1-C1-C1	1289

7590 12/17/2001

Diane F. Covello, Esq.
 Spalding Sports Worldwide, Inc.
 425 Meadow Street
 PO Box 901
 Chicopee, MA 01021-0901

EXAMINER

GORDON, RAEANN

ART UNIT

PAPER NUMBER

3711

DATE MAILED: 12/17/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/776,278		Applicant(s) SULLIVAN, MICHAEL J.	
	Examiner Raeann Gorden		Art Unit 3711	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on 04 October 2001.

2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-8 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☒ Claim(s) 1 and 3 is/are allowed.

6) ☒ Claim(s) 2 and 4-8 is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.

15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892) 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6) <input type="checkbox"/> Other:
---	--

Application/Control Number: 09/776,278
Art Unit: 3711

Page 2

DETAILED ACTION

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 7, an outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi is not in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 4-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Shore D hardness for the outer cover layer is 20 to 40 according to the specification (page 15, line 1).

Allowable Subject Matter

Claims 1 and 3 are allowed.

Application/Control Number: 09/776,278

Page 3

Art Unit: 3711

Terminal Disclaimer

The terminal disclaimer filed on 9-25-01 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 6,210,293 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Response to Arguments

Applicant's arguments filed 10-4-01 have been fully considered but they are not persuasive. The objection to the specification has been maintained. In order to overcome the objection applicant is required to include the subject in the specification.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is (703) 308-8354. The examiner can normally be reached Monday-Thursday and alternating Fridays from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on 703-308-2126. The fax number for the organization where this application or proceeding is assigned is 703-308-7768.

CW 0309052

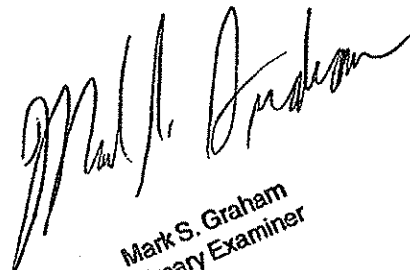
Application/Control Number: 09/776,278

Page 4

Art Unit: 3711

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

rg
12/13/01



Mark S. Graham
Primary Examiner

CW 0309053

MAR 14 '02 07:05PM PATENT DEPT

P.1/B

#9/A
H11
H2/Q

P-3724-2-F1-C1-C1 PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Michael J. Sullivan

Serial No.: 09/776,278

Examiner: R. Gorden

Filing Date: February 2, 2001

Group Art Unit: 3711

For: IMPROVED MULTI-LAYER GOLF BALL

Commissioner for Patents & Trademarks
Washington, DC 20231

FAX RECEIVED
MAR 14 2002
GROUP 3700

Sir:

AMENDMENT

In response to the Office Action of December 17, 2001, please amend the
above-identified application as follows:

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

deposited with the United States Postal
Service with sufficient postage as first class
mail, in an envelope addressed to the Assistant
Commissioner for Patents, Washington,
D.C. 20231.

Date: March 14, 2002

FACSIMILE

XX transmitted by facsimile
to the Patent and Trademark
Office to Examiner R. Gorden
in TC3700 at 703-872-9302.

Michelle Bugbee
Michelle Bugbee

A

MAR 14 '02 07:05PM PATENT DEPT

P.2/8

09/776,278

P-3724-2-F1-C1-C1

IN THE SPECIFICATION

Please replace the paragraph beginning at page 24, line 5, with the following rewritten paragraph:

A/ Moreover, in alternative embodiments, the outer cover layer formulation may also comprise a soft, low modulus, non-ionomeric thermoplastic elastomer having a flex modulus in a range of about 1,000 to about 30,000 psi, including a polyester polyurethane such as B.F. Goodrich Company's Estane[®] polyester polyurethane X-4517. According to B.F. Goodrich, Estane[®] X-4517 has the following properties:

REMARKS

Reconsideration and entry of the amendment are respectfully requested. Claims 1 to 8 are currently pending, and no claims have been amended.

The Office Action mailed December 17, 2001 addressed Claims 1 to 8. Claims 2 and 4 to 8 were rejected, and claims 1 and 3 were allowed. Applicant notes the allowance with appreciation.

The specification was objected to by the Examiner as failing to provide proper antecedent basis for the claimed subject matter, and correction was required. The Examiner stated that in claim 7, an outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi is not in the specification.

The specification has been amended to state that the outer cover layer preferably comprises "a soft, low modulus non-ionomeric thermoplastic elastomer having a flex modulus in a range of about 1,000 to about 30,000 psi,...". Support for this amendment may be found in original claim 6 of a parent application, U.S. Patent Application Serial No. 08/556,237, filed on November 9, 1995. Original claim 6 (initially mislabeled as claim 8 in the specification) specifies that the outer cover layer has a flex modulus in a range of about 1,000 to about 30,000 psi. Specifically, claim 6 reads as follows:

[8.] 6. A multi-layer golf ball comprising:
a spherical core;

MAR 14 '02 07:06PM PATENT DEPT

P. 3/8

09/776,278

P-3724-2-F1-C1-C1

an inner cover layer molded over said spherical core to form a spherical intermediate ball, said inner cover layer comprising an ionomeric resin having no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and having a modulus of from about 15,000 to about 70,000 psi;

an outer cover layer molded over said spherical intermediate ball to form a multi-layer golf ball, the outer layer comprising a non-ionomeric elastomer selected from the group consisting of polyester elastomer, polyester, polyether polyurethane and polyester amide, said outer cover layer having a modulus in a range of about 1,000 to about 30,000 psi. (Emphasis added.)

Applicant therefore respectfully submits that the specification provides proper antecedent basis for the claimed subject matter, therefore Applicant respectfully requests that the objection be reconsidered and withdrawn.

Claims 2 and 4 to 8 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner stated that the Shore D hardness for the outer cover layer is 20 to 40 according to the specification (page 15, line 1).

Applicant respectfully submits that the Shore D hardness for the outer cover layer is not 20 to 40. Applicant respectfully submits that the specification, at page 15, line 1, which is continued from page 14, lines 25 and 26, is describing the Shore D (20 to 40) hardness of a low modulus ionomer suitable for use in the outer layer blend. The Shore D hardness of the outer cover layer, which in claims 2, 4 and 7 is "less than 64" or "64 or less", is supported by the specification. See, for example, the table on page 24, describing Estane® X-4517 as having a Shore D hardness of 39, and Table 9, which shows that the golf balls having an outer cover layer of polyurethane have a Shore C of 65. A Shore C of 65 converts to a Shore D of less than 64, approximately 40 to 50, as shown by both Table 4 on page 14 of GB2276628 and a comparison chart from the Rex Gauge Company (copies attached as Appendix A and Appendix B). Applicant respectfully submits that this overcomes the rejection of claims 2 and 4 to 8

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MAR 14 '02 07:06PM PATENT DEPT

P. 4/8

09/776,278

P-3724-2-F1-C1-C1

under 35 U.S.C. § 112, first paragraph. Applicant therefore respectfully requests that the rejection of claims 2 and 4 to 8 be reconsidered and withdrawn.

Attached hereto is a marked-up version of the changes made to the application by this Amendment. The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

CONCLUSION

Applicant respectfully requests reconsideration and allowance of each of the presently rejected claims, claims 2 and 4 to 8. Applicant respectfully requests allowance of claims 1 to 8, the claims currently pending.

Respectfully submitted,

MICHAEL J. SULLIVAN

Customer No. 24492
Phone: (413) 322-2937

Date: March 14, 2002

By: Michelle Bugbee
Michelle Bugbee, Reg. No. 42,370
Spalding Sports Worldwide
Attorneys for Applicant
425 Meadow Street
P.O. Box 901
Chicopee, MA 01021-0901

cc: Richard M. Klein, Esquire (SLD 2 0035-3-3-1-1-1)

MAR 14 '02 07:07PM PATENT DEPT

P.5/8

09/776,278

P-3724-2-F1-C1-C1

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION

Please replace the paragraph beginning at page 24, line 5, with the following rewritten paragraph:

Moreover, in alternative embodiments, the outer cover layer formulation may also comprise a soft, low modulus, non-ionomeric thermoplastic elastomer having a flex modulus in a range of about 1,000 to about 30,000 psi, including a polyester polyurethane such as B.F. Goodrich Company's Estane[®] polyester polyurethane X-4517. According to B.F. Goodrich, Estane[®] X-4517 has the following properties:

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MAR 14 '02 07:07PM PATENT DEPT

P. 6/8

Appendix A - Page 1

8588755

(12) UK Patent Application (19) GB (17) 2 276 628 (13) A

(43) Date of A Publication 05.10.1994

(21) Application No 9404489.0

(22) Date of Filing 08.03.1994

(30) Priority Data

(31) 05082714 (32) 17.03.1993 (33) JP

(71) Applicant(s)

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(Incorporated in Japan)

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Hideo Watanabe

Jun Shindo

(74) Agent and/or Address for Service

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United Kingdom(51) INT CL⁵

A63B 37/00

(52) UK CL (Edition M)

C3V VEM

C3M MXC M119 M127 M153 M170

C3W W113 W207 W209 W213

U1S S1156

(58) Documents Cited

GB 2264302 A

GB 2214515 A

WPI Abstract Accession No 91-026451/04 & JP

2297384A WPI Abstract Accession No 90-144918/19 &
JP 2092378A

(58) Field of Search

UK CL (Edition M) C3M MXC, C3V VEM

INT CL⁵ A63B

Online databases: WPI

(54) Golf balls

(57) A solid golf ball includes a solid core enclosed in a cover. The resin component of the cover consists of 30 to 100% by weight of an ethylene-methacrylic acid-acrylate terpolymer ionomer resin having a flexural modulus of 2,500 - 14,000 psi and a Shore D hardness of 20 - 59 and 70 to 0% by weight of an ethylene-(meth)acrylic acid copolymer ionomer resin having a flexural modulus of 20,000 - 30,000 psi and a Shore D hardness of 56 - 64. The core is made of a rubber composition comprising 100 parts by weight of a base rubber and 0.2 - 1.5 parts by weight of pentachlorothiophenol and/or metal salt thereof and has a distortion of 2.3 - 3.3 mm under a load of 100 kg. The ball is excellent in spin receptivity, burning resistance, and repulsion.

GB 2 276 628

MAR 14 '02 07:07PM PATENT DEPT

P.7/8

Appendix A - Page 2

Table 4 (Contd.)

	Examples						Comparative Examples					
	1	2	3	4	5	6	7	1	2	3	4	5
Ball properties												
Weight (g)	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2	45.2
Surface hardness	Shore C	82		79	76							
	Shore D	60	57	49	55	53	51	58	59	58	53	61
Distortion (mm)	2.39	2.43	2.57	2.47	2.44	2.52	2.40	2.37	2.38	2.40	2.30	2.36
Initial speed (m/sec.)	77.09	76.83	76.57	76.81	76.59	76.62	76.80	77.22	77.26	76.10	77.15	77.01
Burring test												
Eagle PW	○ or Δ	○	○	○ or Δ	○ or Δ	○	○ or Δ	× or Δ	Δ	×	×	Δ
Restar, HT305 PW	○ or Δ	○	○	○ or Δ	○	○	○	× or Δ	Δ	×	×	Δ
MSX PW	○	○	○	○	○	○	○	Δ	Δ	Δ or ×	Δ or ×	Δ

MAR 14 '02 07:08PM PATENT DEPT

P.8/8

Appendix B

Comparison Chart *This chart is for comparison purposes only. This is not and cannot be used as a conversion chart.*

A	10	20	30	40	50	60	70	80	90	100
B	10	20	30	40	50	60	70	80	90	100
C	10	20	30	40	50	60	70	80	90	100
D	10	20	30	40	50	60	70	80	90	100
DO	10	20	30	40	50	60	70	80	90	100
O	10	20	30	40	50	60	70	80	90	100
OO	10	20	30	40	50	60	70	80	90	100
M	30	40	50	60	70	80	90			

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,278	02/02/2001	Michael J. Sullivan	P-3724-2-F1-C1-C1	1289

7590 06/19/2002

Diane F. Covello, Esq.
Spalding Sports Worldwide, Inc.
425 Meadow Street
PO Box 901
Chicopee, MA 01021-0901

EXAMINER

GORDON, RAEANN

ART UNIT

PAPER NUMBER

3711

DATE MAILED: 06/19/2002

10

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,278

Applicant(s)

SULLIVAN, MICHAEL J.

Examiner

Raeann Gorden

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

MAR 14 '02 07:08PM PATENT DEPT

P.8/8

Appendix B

Comparison Chart *This chart is for comparison purposes only. This is not and cannot be used as a conversion chart.*

A	10	20	30	40	50	60	70	80	90	100
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O	10	20	30	40	50	60	70	80	90	100
OO	10	20	30	40	50	60	70	80	90	100
M	30	40	50	60	70	80	90			

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EXAMINER

GORDON, RAEANN

ART UNIT

PAPER NUMBER

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09/776,278

Applicant(s)

SULLIVAN, MICHAEL J.

Examiner

Raeann Gorden

Art Unit

3711

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- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
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- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
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- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Application/Control Number: 09/776,278
Art Unit: 3711

Page 2

DETAILED ACTION

The indicated allowability of claims 1 and 3 has been withdrawn.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 4-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Shore D hardness less than 64 for the outer cover layer has not been disclosed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt in view of Sullivan '814 and Wu. Nesbitt discloses a golf ball comprising a core, an inner cover layer, and an outer cover layer. The inner cover layer has a thickness

CW 0309064

Application/Control Number: 09/776,278
Art Unit: 3711

Page 3

form 0.020 to 0.070 inch and is made from a high flexural modulus ionomer. The outer cover layer has a thickness from 0.020 to 0.10 inch and is made from a low flexural modulus ionomer. The golf ball has an overall diameter of 1.68 inches. Nesbitt further discloses the inner cover layer material may include Surlyn 1605, which has a 15% acid content. Nesbitt does not disclose a blend of ionomers for the inner cover layer. Sullivan teaches a blend ionomers for the cover layer. One skilled in the art would have included additional ionomers to provide improve the durability. Nesbitt also does not disclose polyurethane for the outer cover. Wu teaches a polyurethane cover. One skilled in the art would have modified the cover material with polyurethane since it is known to provide good shear resistance, cut resistance, durability, and resiliency (Wu col 2).

Response to Arguments

Applicant's arguments filed 3-14-02 have been fully considered but they are not persuasive. The 35 U.S.C. 112, first paragraph rejection is maintained. Applicant does not disclose a Shore D hardness less than 64 for the outer cover layer. Applicant argues the specification discloses a Shore D hardness of 39 (page 24) and a Shore C hardness of 65 (table), which converts to approximately 41 on the Shore D scale. The entire range is not fully disclosed.

Application/Control Number: 09/776,278
Art Unit: 3711

Page 4

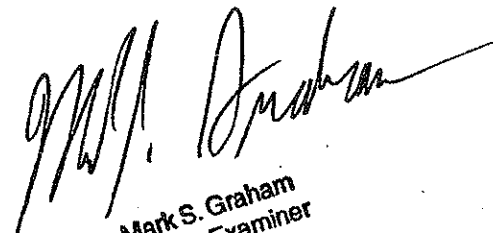
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is (703) 308-8354. The examiner can normally be reached Monday-Thursday and alternating Fridays from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on 703-308-2126. The fax number for the organization where this application or proceeding is assigned is 703-308-7768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

rg
June 6, 2002



Mark S. Graham
Primary Examiner

Notice of References Cited

Application/Control No.

09/776,278

Applicant(s)/Patent Under
Reexamination
SULLIVAN, MICHAEL J.

Examiner

Raeann Gorden

Art Unit

3711

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5334673	08-1994	Wu	473/378
	B	US-4431193	02-1984	Nesbitt	473/373
	C	US-5387470	02-1995	Parnell	428/215
	D	US-4884814	12-1989	Sullivan	473/378
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
 Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

SEP 16 '02 11:53AM PATENT DEPT

P.1/6

P-3724-2-F1-C1-C1 **PATENT**
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Michael J. Sullivan

Serial No.: 09/776,278

Examiner: R. Gorden

Filing Date: February 2, 2001

Group Art Unit: 3711

For: IMPROVED MULTI-LAYER GOLF BALL

Commissioner for Patents & Trademarks
Washington, DC 20231

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SEP 16 2002
GROUP 3700

Sir:

RESPONSE

In response to the Office Action of June 19, 2002, please consider the following remarks:

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

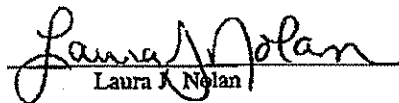
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Date: 9/16, 2002

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Laura A. Nolan

Received from <4133222575> at 9/16/02 11:52:26 AM [Eastern Daylight Time]

CW 0309068

SEP 16 '02 11:53AM PATENT DEPT

P.2/6

09/776,278

P-3724-2-F1-C1-C1

REMARKS

Reconsideration of the application and entry of the amendment are respectfully requested. Claims 1 to 8 are currently pending, and no claims have been amended.

The Office Action mailed June 19, 2002 addressed Claims 1 to 8. Claims 1 to 8 were rejected.

Claims 2 and 4 to 8 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner stated that the Shore D hardness less than 64 for the outer cover has not been disclosed.

Applicant respectfully submits that the Shore D hardness of less than 64 for the outer cover layer has been disclosed. Applicant respectfully submits that original claims 1 and 5 of a parent application, U.S. Patent Application Serial No. 08/556,237, filed on November 9, 1995, disclose "an outer cover layer having a Shore D hardness of 64 or less" and "an outer cover layer having a Shore D hardness of about 64 or less" respectively. Since the original claims are considered part of the specification, Applicant respectfully submits that the Shore D hardness of 64 or less has been disclosed. Applicant would be amenable to amending the specification to contain this specific language if required by the Examiner. Applicant respectfully submits that this overcomes the rejection of claims 2 and 4 to 8 under 35 U.S.C. § 112, first paragraph. Applicant therefore respectfully requests that the rejection of claims 2 and 4 to 8 be reconsidered and withdrawn.

Claims 1 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt in view of Sullivan '814 and Wu. The Examiner stated that Nesbitt discloses a golf ball comprising a core, an inner cover layer and an outer cover layer. The Examiner further stated that the inner cover layer has a thickness from 0.020 to 0.070 inches and is made from a high flexural modulus ionomer, and the outer cover has a thickness of from 0.020 to 0.10 inches and is made from a low flexural modulus ionomer. The Examiner further stated that the golf ball has an overall diameter of 1.68 inches, and the inner cover layer material may include Surlyn 1605 which has a 15%

SEP 16 '02 11:54AM PATENT DEPT

P.3/6

09/776,278

P-3724-2-F1-C1-C1

acid content. The Examiner further stated that Nesbitt does not disclose a blend of ionomers for the inner cover layer, but Sullivan teaches a blend of ionomers for the cover layer, and one skilled in the art would have included additional ionomers to improve the durability. The Examiner concluded that Nesbitt also does not disclose polyurethane for the outer cover, but Wu teaches a polyurethane cover, and one skilled in the art would have modified the cover material with polyurethane since it is known to provide good shear resistance, cut resistance, durability, and resiliency.

Applicant respectfully submits that the Examiner has failed to make out a *prima facie* case of obviousness. Nesbitt, the primary reference, discloses a golf ball comprising a core and a multi-layer cover. The inner cover layer comprises a hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively. Nesbitt does not disclose a multi-layer cover where the inner cover layer comprises a high acid ionomer containing no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and the outer cover layer comprises a polyurethane material.

Sullivan discloses a two piece golf ball having a core and a cover, wherein the cover is formed from a blend of a hard and a soft ionomer. The hard and soft ionomers are very specific ionomers, and the soft ionomer is a terpolymer. The two ionomers are blended in specific ratios. Sullivan does not disclose blending two ionomers wherein at least one of the ionomers contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid.

Applicant respectfully submits that there is no motivation or teaching to combine Nesbitt and Sullivan. There is no motivation to substitute the blend of a hard ionomer and soft ionomer terpolymer of Sullivan for the low acid ionomer of Nesbitt because Nesbitt as an inner cover containing a high flexural modulus ionomer and an outer cover containing a low flexural modulus ionomer. Additionally, Applicant respectfully submits that there is no motivation, teaching or suggestion in Sullivan to use a blend of ionomer resins of any type in an inner cover layer. Instead, the only specific teaching in Sullivan shows blends of ionomers in golf ball outer covers of two piece golf balls.

SEP 16 '02 11:55AM PATENT DEPT

P.4/6

09/776,278

P-3724-2-F1-C1-C1

Wu is directed to a golf ball having a core and a single layer cover comprising a specific polyurethane. Wu does not disclose a multi-layer cover.

Since, as discussed above, the primary reference, Nesbitt, is deficient because it does not disclose a golf ball having a multi-layer cover, wherein the inner cover layer comprises a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and the outer cover layer comprises a polyurethane material, the addition of Sullivan and/or Wu as a secondary reference does not cure this deficiency. Applicant respectfully submits that even if Sullivan is combined with Nesbitt, Sullivan is not directed to a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid, therefore the combination would not produce a golf ball having a cover layer containing blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid. Furthermore, Applicant respectfully submits that one skilled in the art would not be motivated by Wu to add a polyurethane cover to Nesbitt because Nesbitt has a multi-layer cover with specific features, and Wu has a single layer cover. Even if both Sullivan and Wu were combined with Nesbitt, Applicant's golf ball would not be produced because neither Nesbitt alone as the primary reference, nor in combination with Sullivan and/or Wu, produces a golf ball comprising an inner cover layer comprising a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and an outer cover layer comprising a polyurethane. Both Wu and Sullivan are directed to golf balls with single cover layers, therefore, there is no motivation to substitute either the blend of ionomers of Sullivan's outer cover or the specific polyurethane of Wu's outer cover for the inner cover layer of Nesbitt.

Furthermore, Applicant respectfully submits that a prior art patent, such as Nesbitt, Sullivan or Wu, must be considered as a whole, and it is impermissible to pick and choose from one reference only so much of it as will support a given position to the exclusion of other parts necessary for the full appreciation of what the reference fairly suggests to one skilled in the art. Applicant respectfully submits that the Examiner is

SEP 16 '02 11:55AM PATENT DEPT

P.5/6

09/776,278

P-3724-2-F1-C1-C1

picking and choosing cover materials from prior art patents directed to golf balls with a single layer cover in an attempt to recreate Applicant's invention.

Applicant respectfully submits that one skilled in the art would not add the ionomer blend of Sullivan to the cover of Nesbitt because Sullivan's ionomer blend is a very specific blend of a hard ionomer and a soft terpolymer ionomer and the cover of Sullivan is a single layer, nor would one skilled in the art add the polyurethane of Wu to the cover of Nesbitt because the cover of Wu is a single layer and one would not add the single layer polyurethane cover of Wu to the multi-layer cover of Nesbitt since it would not necessarily achieve the same goals as a specific combination of cover layers such as that in Nesbitt.

For at least these reasons, Applicant respectfully submits that claims 1 and 3 are not obvious under 35 U.S.C. § 103(a) over Nesbitt in view of Sullivan and Wu. Applicant therefore respectfully requests that the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) as obvious over Nesbitt in view of Sullivan and Wu be reconsidered and withdrawn.

The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

SEP 16 '02 11:55AM PATENT DEPT

P.6/6

09/776,278

P-3724-2-F1-C1-C1

CONCLUSION

Applicant respectfully requests reconsideration and allowance of each of the presently rejected claims, claims 1 to 8. Applicant respectfully requests allowance of claims 1 to 8, the claims currently pending.

Respectfully submitted,

MICHAEL J. SULLIVAN

Customer No. 24492
Phone: (413) 322-2937

Date: September 16, 2002

By: Michelle Bugbee
Michelle Bugbee, Reg. No. 42,370
Spalding Sports Worldwide
Attorneys for Applicant
425 Meadow Street
P.O. Box 901
Chicopee, MA 01021-0901

cc: Richard M. Klein, Esquire (SLD 2 0035-3-3-1-1)



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,278	02/02/2001	Michael J. Sullivan	P-3724-2-F1-C1-C1	1289

7590 11/25/2002

Diane F. Covello, Esq.
Spalding Sports Worldwide, Inc.
425 Meadow Street
PO Box 901
Chicopee, MA 01021-0901

EXAMINER

GORDON, RAEANN

ART UNIT

PAPER NUMBER

3711

DATE MAILED: 11/25/2002

#12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/776,278

Applicant(s)

SULLIVAN, MICHAEL J.

Examiner

Raeann Gorden

Art Unit

3711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
 Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 September 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
 If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
 * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

Application/Control Number: 09/776,278
Art Unit: 3711

Page 2

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 2 and 4-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The Shore D hardness less than 64 for the outer cover layer has not been disclosed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt in view of Sullivan '814 and Wu. Nesbitt discloses a golf ball comprising a core, an inner cover layer, and an outer cover layer. The inner cover layer has a thickness from 0.020 to 0.070 inch and is made from a high flexural modulus ionomer. The outer cover layer has a thickness from 0.020 to 0.10 inch and is made from a low flexural

Application/Control Number: 09/776,278
Art Unit: 3711

Page 3

modulus ionomer. The golf ball has an overall diameter of 1.68 inches. Nesbitt further discloses the inner cover layer material may include Surlyn 1605, which has a 15% acid content. Nesbitt does not disclose a blend of ionomers for the inner cover layer. Sullivan teaches a blend ionomers for the cover layer. One skilled in the art would have included additional ionomers to provide improve the durability. Nesbitt also does not disclose polyurethane for the outer cover. Wu teaches a polyurethane cover. One skilled in the art would have modified the cover material with polyurethane since it is known to provide good shear resistance, cut resistance, durability, and resiliency (Wu col 2).

Response to Arguments

Applicant's arguments filed 9-16-02 have been fully considered but they are not persuasive. The 35 U.S.C. 112, first paragraph rejection is maintained. To overcome the rejection, applicant is required to amend the specification to include the hardness for the outer cover layer as well as provide a copy of the originally filed claims from the parent application which applicant seeks to claim priority. Applicant's arguments in regards to the prior art rejection are not persuasive. Applicant argues there is no motivation to modify Nesbitt with Sullivan and Wu by substituting the materials for the cover layers. The primary reference, Nesbitt, discloses applicant's invention but fails to disclose the materials for the cover layers. Applicant claims an inner cover layer comprising at least two ionomers, wherein at least one of the ionomers contain no more than 16% acid. Nesbitt discloses an inner cover layer comprising one ionomer with an

Application/Control Number: 09/776,278
Art Unit: 3711

Page 4

acid content less than 16%. Sullivan teaches cover compositions comprising at least two ionomers. Although Sullivan does not mention the acid content of the ionomers it is well known that the Surlyn ionomers taught by Sullivan are not high acid ionomers and contain less than 16% acid. The Wu reference is also used a secondary reference to teach the polyurethane for the outer cover layer. The Nesbitt reference discloses a soft outer cover layer but only discloses soft ionomers. Since polyurethanes are known in the golfing art for providing softer covers with increased durability and resiliency the modification is within the capabilities of one skilled in the art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raeann Gorden whose telephone number is (703) 308-

CW 0309078

Application/Control Number: 09/776,278
Art Unit: 3711

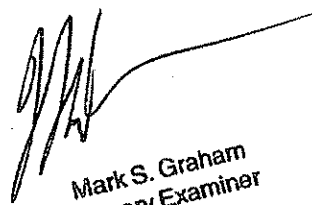
Page 5

8354. The examiner can normally be reached Monday-Thursday and alternating Fridays from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Sewell can be reached on 703-308-2126. The fax number for the organization where this application or proceeding is assigned is 703-308-7768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

rg
November 20, 2002



Mark S. Graham
Primary Examiner

CW 0309079

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P.1

1-23-03

13/Amot
BRS

P-3724-2-F1-C1-C1 PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of Michael J. Sullivan

Serial No.: 09/776,278

Examiner: R. Gorden

Filing Date: February 2, 2001

Group Art Unit: 3711

For: IMPROVED MULTI-LAYER GOLF BALL

Box AF

Commissioner for Patents & Trademarks

Washington, DC 20231

FAX RECEIVED

JAN 21 2003

GROUP 3700

Sir:

RESPONSE TO FINAL OFFICE ACTION UNDER 37 CFR § 1.116

This is in response to the Final Office Action mailed November 25, 2002, in connection with the present application. Entry of the following amendment to the application is requested.

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. 1.8a)

I hereby certify that this correspondence is, on the date shown below, being:

MAILING

— deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to the Assistant Commissioner for Patents, Washington, D.C. 20231.

Date: 1/21, 2003

FACSIMILE

XX transmitted by facsimile to the Patent and Trademark Office to Examiner R. Gorden in TC3700 at 703-872-9303.

Laura J. Nolan
Laura J. Nolan

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P.2

09/776,278

P-3724-2-F1-C1-C1

IN THE SPECIFICATION

Please replace the paragraph beginning at page 24, line 23 with the following rewritten paragraph:

Other soft, relatively low modulus non-ionomeric thermoplastic elastomers may also be utilized to produce the outer cover layer as long as the non-ionomeric thermoplastic elastomers produce the playability and durability characteristics desired without adversely effecting the enhanced spin characteristics produced by the low acid ionomer resin compositions. Preferably, the non-ionomeric thermoplastic elastomers have a Shore D hardness of 64 or less. These include, but are not limited to thermoplastic polyurethanes such as: Texin[®] thermoplastic polyurethanes from Mobay Chemical Co. and the Pellethane[®] thermoplastic polyurethanes from Dow Chemical Co.; Ionomer/rubber blends such as those in Spalding U.S. Patents 4,986,545; 5,098,105 and 5,187,013; and, Hytrel[®] polyester elastomers from DuPont and Pebax[®] polyetheramides from Elf Atochem S.A.

REMARKS

Reconsideration of the application and entry of the amendment are respectfully requested. Claims 1 to 8 are currently pending, and no claims have been amended.

The Final Office Action mailed November 25, 2002 addressed claims 1 to 8. Claims 1 to 8 were rejected.

Claims 2 and 4 to 8 were rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The Examiner stated that the Shore D hardness less than 64 for the outer cover has not been disclosed.

Applicant respectfully submits that the Shore D hardness of less than 64 for the outer cover layer has been disclosed. Applicant respectfully submits that original claims 1 and 5 of a parent application, U.S. Patent Application Serial No. 08/556,237, filed on November 9, 1995, disclose "an outer cover layer having a Shore D hardness of 64 or less" and "an outer cover layer having a Shore D hardness of about 64 or less"

JAN 21 '03 07:44AM PATENT DEPT

P.3

09/776,278

P-3724-2-F1-C1-C1

respectively. Since the original claims are considered part of the specification, Applicant respectfully submits that the Shore D hardness of 64 or less has been disclosed. As required by the Examiner in the Final Office Action, the specification has been amended to include the hardness for the outer cover layer, and a copy of the originally filed claims is attached to this response. Applicant respectfully submits that this overcomes the rejection of claims 2 and 4 to 8 under 35 U.S.C. § 112, first paragraph. Applicant therefore respectfully requests that the rejection of claims 2 and 4 to 8 be reconsidered and withdrawn.

Claims 1 and 3 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nesbitt in view of Sullivan '814 and Wu. The Examiner stated that Nesbitt discloses a golf ball comprising a core, an inner cover layer and an outer cover layer. The Examiner further stated that the inner cover layer has a thickness from 0.020 to 0.070 inches and is made from a high flexural modulus ionomer, and the outer cover has a thickness of from 0.020 to 0.10 inches and is made from a low flexural modulus ionomer. The Examiner further stated that the golf ball has an overall diameter of 1.68 inches, and the inner cover layer material may include Surlyn 1605 which has a 15% acid content. The Examiner further stated that Nesbitt does not disclose a blend of ionomers for the inner cover layer, but Sullivan teaches a blend of ionomers for the cover layer, and one skilled in the art would have included additional ionomers to improve the durability. The Examiner concluded that Nesbitt also does not disclose polyurethane for the outer cover, but Wu teaches a polyurethane cover, and one skilled in the art would have modified the cover material with polyurethane since it is known to provide good shear resistance, cut resistance, durability, and resiliency.

Applicant respectfully submits that the Examiner has failed to make out a *prima facie* case of obviousness. Nesbitt, the primary reference, discloses a golf ball comprising a core and an improved multi-layer cover. The inner cover layer comprises a single hard, high flexural modulus ionomer, and the outer cover layer comprises a soft, low flexural modulus ionomer. Nesbitt uses as examples Surlyn® 1605 and 1855 ionomers, high and low flexural modulus ionomers respectively. Nesbitt does not disclose a multi-layer cover where the inner cover layer comprises a blend of two or

JAN 21 '03 07:45AM PATENT DEPT

P. 4

09/776,278

P-3724-2-F1-C1-C1

more ionomers wherein at least one ionomer is an ionomer containing no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and the outer cover layer comprises a polyurethane material.

Sullivan discloses a two piece golf ball having a core and a cover, wherein the cover is formed from a blend of a hard and a soft ionomer. The hard and soft ionomers are very specific ionomers, and the soft ionomer is a terpolymer. The two ionomers are blended in specific ratios. Sullivan does not disclose blending two ionomers wherein at least one of the ionomers contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid.

Applicant respectfully submits that there is no motivation or teaching to combine Nesbitt and Sullivan. There is no motivation to substitute the single layer cover of Sullivan that comprises a blend of a hard ionomer and soft ionomer terpolymer for the single, high flex modulus ionomer of Nesbitt's inner cover layer, but even if it was substituted, a golf ball having an inner cover layer comprising a blend of ionomers wherein at least one of the ionomers comprises no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid would not be produced. Additionally, Applicant respectfully submits that there is no motivation, teaching or suggestion in Sullivan to use a blend of ionomer resins of any type in an inner cover layer. Instead, the only specific teaching in Sullivan shows blends of ionomers in golf ball outer covers or single, thicker cover layers of two piece golf balls.

Wu is directed to a golf ball having a core and a single layer cover comprising a specific polyurethane. Wu does not disclose a multi-layer cover.

Since, as discussed above, the primary reference, Nesbitt, is deficient because it does not disclose a golf ball having a multi-layer cover, wherein the inner cover layer comprises a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and the outer cover layer comprises a polyurethane material, the addition of Sullivan and/or Wu as a secondary reference does not cure this deficiency. Applicant respectfully submits that even if Sullivan is combined with Nesbitt, Sullivan is not directed to a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of

JAN 21 '03 07:45AM PATENT DEPT

P.5

09/776,278

P-3724-2-F1-C1-C1

an alpha, beta-unsaturated carboxylic acid, therefore the combination would not produce a golf ball having a cover layer containing blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid. Furthermore, Applicant respectfully submits that one skilled in the art would not be motivated by Wu to add a polyurethane cover to Nesbitt because Nesbitt has a multi-layer cover with specific features, and Wu has a single layer cover. Even if both Sullivan and Wu were combined with Nesbitt, Applicant's golf ball would not be produced because neither Nesbitt alone as the primary reference, nor in combination with Sullivan and/or Wu, produces a golf ball comprising an inner cover layer comprising a blend of two or more ionomers wherein at least one ionomer contains no more than 16% by weight of an alpha, beta-unsaturated carboxylic acid and an outer cover layer comprising a polyurethane. Both Wu and Sullivan are directed to golf balls with single cover layers, therefore, there is no motivation to substitute either the blend of ionomers of Sullivan's single cover layer or the specific polyurethane of Wu's single cover layer for the inner cover layer of Nesbitt.

Furthermore, Applicant respectfully submits that a prior art patent, such as Nesbitt, Sullivan or Wu, must be considered as a whole, and it is impermissible to pick and choose from one reference only so much of it as will support a given position to the exclusion of other parts necessary for the full appreciation of what the reference fairly suggests to one skilled in the art. Applicant respectfully submits that the Examiner is picking and choosing cover materials from prior art patents directed to golf balls with a single layer cover in an attempt to recreate Applicant's invention. Applicant respectfully submits that the Examiner has not shown the motivation, teaching or suggestion to combine Sullivan and Wu with Nesbitt, and the only teaching is found in Applicant's own disclosure.

Finally, Applicant respectfully submits that one skilled in the art would not add the ionomer blend of Sullivan to the cover of Nesbitt because Sullivan's ionomer blend is a very specific blend of a hard ionomer and a soft terpolymer ionomer and the cover of Sullivan is a single layer, nor would one skilled in the art add the polyurethane of Wu to the cover of Nesbitt because the cover of Wu is a single layer and one would not

JAN 21 '03 07:46AM PATENT DEPT

P.6

09/776,278

P-3724-2-F1-C1-C1

add the single layer polyurethane cover of Wu to the multi-layer cover of Nesbitt since it would not necessarily achieve the same goals as a specific combination of cover layers such as that in Nesbitt.

For at least these reasons, Applicant respectfully submits that claims 1 and 3 are not obvious under 35 U.S.C. § 103(a) over Nesbitt in view of Sullivan and Wu. Applicant therefore respectfully requests that the rejection of claims 1 and 3 under 35 U.S.C. § 103(a) as obvious over Nesbitt in view of Sullivan and Wu be reconsidered and withdrawn.

Attached hereto is a marked-up version of the changes made to the application by this Amendment. The Examiner is invited to telephone Applicant's attorney if it is deemed that a telephone conversation will hasten prosecution of the application.

CONCLUSION

Applicant respectfully requests reconsideration and allowance of each of the presently rejected claims, claims 1 to 8. Applicant respectfully requests allowance of claims 1 to 8, the claims currently pending.

Respectfully submitted,

MICHAEL J. SULLIVAN

Customer No. 24492
Phone: (413) 322-2937

Date: January 20, 2003

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